



CITY OF LODI

PUBLIC WORKS DEPARTMENT

COUNCIL COMMUNICATION

TO: City Council
FROM: City Manager
MEETING DATE: February 1, 1989
AGENDA TITLE: Award Contract for Well 22 Pump and Motor, 2040 South Cherokee Lane

Project Data
Originally Budgeted: 1987/88
Budgeted Fund: Water Capital Outlay
Bid Opening Date: 1/18/89

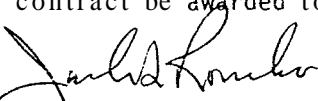
RECOMMENDED ACTION: That the City Council award the contract for the above project to Zim Industries/Ingersoll-Rand in the amount of \$20,968.00.

BACKGROUND INFORMATION: This project consists of furnishing and installing a pump and motor for Well 22.

The specifications included provisions for analyzing the bids based on an analysis of future power costs. The 12 bids received from 4 pump contractors are shown on the attached tabulation.

As noted in the footnotes, the bids from Moorman's Water Systems and Noack Pump Company included exceptions to the specified warranty. The City has requested a non-standard warranty on previous bids and has not had exceptions taken. The specified 4,000 hours instead of 1 year protects the City in the event the pump is not used very much in the first year. We have had one occasion in the past few years where a motor failed after 1 year but less than 4,000 hours. The supplier (Zim Industries/U.S. Motors) repaired the motor at no charge to the City. The two suppliers who did not take exception to the warranty were both contacted. They were aware of the requirement and were willing to provide the requested warranty.

It should also be noted that we received written notice of a numerical error in the bid from Noack/Byron Jackson, therefore, this bid should be withdrawn. Also, the analysis shows that the Worthington-Dresser pump proposed by Kirby's Pump is slightly more efficient than the Ingersoll-Rand unit proposed by Zim Industries. However, it would take approximately 10 years before the total costs were equal. Therefore, the recommendation is made that the contract be awarded to Zim Industries for the Ingersoll-Rand pump.


Jack L. Ronsko
Public Works Director

JLR/RCP/mt

Attachment

cc: Purchasing Officer
Water/Wastewater Supt.

APPROVED:

FILE NO.

FILE NO.

CWELL22.5/TXTW.02M

THOMAS A. PETERSON, City Manager

January 24, 1989

Well 22 Pump & Motor Cost Analysis

Power Cost: \$ 0.07177 per Kwhr

Analysis Flow: 750 Million Gallons (MG)

Bidder Rank based on first cost	Pump Mfr/Model No. days delivery	Bid Price Mat/Lab/Total	T. Field Head	Flow (gpm)	T. Fric. Losses	T. Lab Head	Bowl Eff.	Lab HP	HP Losses Shaft	Brake HP	Field Eff.	Motor Eff.	Overall Eff.	Input Kw	Pumping Hours	Power Cost	Total Cost	Rank	
Moorman's Water Systems • 5	E. Morse 14W 7000 115	\$ 19,613.00 1,050.00 20,663.00	320 270 232	400 1500 1780	0.00 3.08 3.88	320.00 273.08 235.88	0.790 0.840 0.810	46.18 123.14 130.90	1.92 1.92 1.92	0.50 0.44 0.40	48.80 125.50 133.22	0.665 0.815 0.783	0.943 0.943 0.943	0.627 0.768 0.738	38.44 99.28 105.39	10417 2778 2341	\$ 66,239	\$ 86,902	7
Moorman's Water Systems • 7 8	Peabody-Floway 14DK1 115	20,125.00 1,050.00 21,175.00	320 270 232	1100 1500 1700	1.80 4.00 5.20	321.80 274.00 237.20	0.754 0.840 0.835	118.55 123.56 121.95	1.80 1.80 1.80	1.80 1.50 1.40	122.15 126.86 125.15	0.728 0.806 0.796	0.943 0.943 0.943	0.686 0.760 0.750	96.63 100.36 99.01	3788 2778 2451	\$ 63,693	\$ 84,868	4
Moorman's Water Systems • 7 8	Peabody-Floway 14DKM 115	20,125.00 1,050.00 21,175.00	320 270 232	925 1500 1750	1.60 4.00 5.20	321.60 274.00 237.20	0.674 0.843 0.845	111.46 123.12 124.05	1.80 1.80 1.80	1.80 1.50 1.40	115.06 126.42 127.25	0.650 0.809 0.806	0.943 0.943 0.943	0.613 0.763 0.760	91.02 100.01 100.67	4505 2778 2381	\$ 66,565	\$ 87,740	8
Noack Pump Co. *** 2 3	Peabody-Floway 14DK1 105	19,111.00 750.00 19,861.00	320 270 232	1100 1500 1700	1.80 4.00 5.20	321.80 274.00 237.20	0.754 0.840 0.835	118.55 123.56 121.95	1.80 1.80 1.80	1.80 1.50 1.40	122.15 126.86 125.15	0.728 0.806 0.796	0.943 0.943 0.943	0.686 0.760 0.750	96.63 100.36 99.01	3788 2778 2451	\$ 63,693	\$ 83,554	1
Noack Pump Co. *** 2 3	Peabody-Floway 14DKM 105	19,111.00 750.00 19,861.00	320 270 232	925 1500 1750	1.60 4.00 5.20	321.60 274.00 237.20	0.674 0.843 0.845	111.46 123.12 124.05	1.80 1.80 1.80	1.80 1.50 1.40	115.06 126.42 127.25	0.650 0.809 0.806	0.943 0.943 0.943	0.613 0.763 0.760	91.02 100.01 100.67	4505 2778 2381	\$ 66,565	\$ 86,426	6
Noack Pump Co. • 4	Goulds 14 RJIC 105	19,703.00 750.00 20,453.00	320 270 232	1110 1500 1725	2.12 3.60 4.60	322.12 273.60 236.60	0.750 0.830 0.810	120.39 124.86 127.24	1.76 1.76 1.76	0.69 0.60 0.53	122.84 127.22 129.53	0.730 0.804 0.780	0.943 0.943 0.943	0.689 0.758 0.735	97.18 100.65 102.47	3754 2778 2415	\$ 64,009	\$ 84,462	2
Noack Pump Co. • 8	Heerless 14 MC 120	20,823.00 750.00 21,573.00	320 270 232	900 1500 1730	1.59 3.86 5.44	321.59 273.86 237.44	0.600 0.820 0.820	121.81 126.51 126.50	2.00 2.00 2.00	0.55 0.41 0.33	124.37 128.92 128.83	0.585 0.793 0.787	0.943 0.943 0.943	0.551 0.748 0.742	98.39 101.99 101.92	4630 2778 2408	\$ 70,641	\$ 92,214	11
Noack Pump Co. • bid error corrected to \$23573	Byron Jackson 13MOH 75	19,703.00 750.00 20,453.00	320 270 232	1000 1500 1700	1.56 3.18 3.56	321.58 273.18 235.56	0.760 0.820 0.790	106.85 126.19 128.01	1.68 1.68 1.68	0.60 0.48 0.40	109.13 128.35 130.09	0.740 0.797 0.766	0.943 0.943 0.943	0.698 0.751 0.722	86.33 101.54 102.91	4167 2778 2451	\$ 64,162		
Zim Industries 1	Fairbanks Morse 14W 112	18,752.00 800.00 19,552.00	320 270 232	625 1500 1760	0.00 3.70 4.60	320.00 273.70 236.60	0.650 0.840 0.810	77.70 123.42 129.82	1.89 1.89 1.89	0.50 0.40 0.40	80.09 125.71 132.11	0.631 0.814 0.780	0.943 0.943 0.943	0.595 0.767 0.736	63.36 99.45 104.51	6667 2778 2367	\$ 67,899	\$ 87,451	9
Zim Industries 6	Ingersoll Rand 12NKL 112	20,168.00 800.00 20,968.00	320 270 232	1075 1500 1760	2.50 4.20 5.10	322.50 274.20 237.10	0.750 0.850 0.825	111.30 122.19 127.73	1.89 1.89 1.89	0.80 0.70 0.65	113.99 124.78 130.27	0.727 0.820 0.792	0.943 0.943 0.943	0.685 0.773 0.745	90.18 98.71 103.06	4065 2778 2367	\$ 63,499	\$ 84,467	3
Kirby's Pump 10	Worthington-Dresser 154	20,878.00 1,000.00 21,878.00	320 270 232	960 1500 1760	1.30 3.50 4.30	321.30 273.50 236.30	0.750 0.845 0.830	103.85 122.60 126.53	1.80 1.80 1.80	0.60 0.50 0.50	106.25 125.00 128.83	0.730 0.818 0.800	0.943 0.943 0.943	0.688 0.772 0.755	84.06 98.89 101.92	4340 2778 2367	\$ 63,215	\$ 85,093	5
Kirby's Pump 11	Byron Jackson 13MOH 154	22,827.00 1,000.00 23,827.00	320 270 232	1000 1500 1700	1.58 3.18 3.56	321.58 273.18 235.56	0.760 0.820 0.790	106.85 126.19 128.01	1.68 1.68 1.68	0.60 0.48 0.40	109.13 128.35 130.09	0.740 0.797 0.766	0.943 0.943 0.943	0.698 0.751 0.722	86.33 101.54 102.91	4167 2778 2451	\$ 64,162	\$ 87,989	10

Notes

• 1 year from start up warranty instead of 4000 hrs specified
 ** offered \$472 deduct for std. lineshaft

*** same as • plus qualification that well straightness may affect warranty
 / aluminum frame motor instead of cast iron specified

1/23/89 P&WV22.XLS

RESOLUTION NO. 89-14

A RESOLUTION OF THE LODI CITY COUNCIL
AWARDING THE CONTRACT FOR WELL 22 PUMP AND MOTOR
2040 SOUTH CHEROKEE LANE, LODI

WHEREAS, in answer to notice duly published in accordance with law and the order of this City Council, sealed bids were received and publicly opened on January 18, 1989 at 11:00 a.m. **for** the contract for Well 22 pump and motor, 2040 South Cherokee Lane, Lodi, described in the specifications therefor approved by the City Council on December 21, 1988; and

WHEREAS, said bids have been compared, checked, and tabulated and a report thereof filed with the City Manager as shown on Exhibit A attached hereto and incorporated herein; and

WHEREAS, as noted in the footnotes, the bids from Moorman's Water Systems and Noack Pump Company included exceptions to the specified warranty; **and**

WHEREAS, written notice was received of a numerical error in the bid from Noack/Byron Jackson, and therefore, this bid should be withdrawn; and

WHEREAS, the City Manager recommends that award of the contract for Well 22 pump and motor be made to Zim Industries for the Ingersoll-Rand pump;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Lodi that award of contract for Well 22 pump and motor, 2040 South Cherokee Lane be and the same is hereby awarded **to** Zim Industries for the Ingersoll-Rand pump, in the amount of \$20,968.00.

Dated: February 1, 1989

I hereby certify that Resolution No. 89-14 was passed and adopted by the City Council of the City of Lodi in a regular meeting held February 1, 1989 by the following vote:

Ayes: Council ~~Members~~ - Hinchman, Olson, Reid, Snider and
Pinkerton (Mayor)

Noes: Council ~~Members~~ - None

Absent: Council ~~Members~~ - None


Alice M. Reimche
City Clerk

Well 22 Pump & Motor Cost Analysis

Power Cost: \$ 0.07177 per Kwhr

Analysis Flow: 750 Million Gallons (MG)

Bidder	Pump Mfr/Model	Bid Price	1 Field	Flow	1. Fric.	1. Tot	Flow	1. Tot	HP	HP	HP	Field	Motor	Overall	Input	Pumping	Power	Total	Rank
Rank based on bid cost	No. days delivery	Mut/Lab/Total	Head	(gpm)	Losses	Head	L.H.	HP	Shaft	Bearing	HP	L.H.	L.H.	L.H.	Kw	Hours	Cost	Cost	
Maceman's Water Systems • 5	1. Morse 14M 7500 115	\$ 19,613.00 1,040.00 20,653.00	320 270 232	400 1500 1780	0.00 3.08 3.88	320.00 273.08 235.88	0.700 0.840 0.810	46.18 123.14 130.90	1.92 1.92 1.97	0.50 0.44 0.40	48.60 125.50 133.22	0.165 0.815 0.783	0.943 0.943 0.943	0.627 0.768 0.738	38.44 99.28 109.39	10417 2778 2541	\$ 66,239	\$ 86,902	7
Maceman's Water Systems • 7 R	Peabody Floway 140K1 115	20,125.00 1,050.00 21,175.00	320 270 232	1100 1500 1700	1.80 4.00 5.20	321.80 274.00 237.20	0.754 0.840 0.835	118.55 123.56 121.95	1.80 1.80 1.80	1.80 1.50 1.40	122.15 126.86 125.15	0.728 0.806 0.796	0.943 0.943 0.943	0.686 0.760 0.750	96.63 100.36 99.01	3788 2778 2451	\$ 63,693	\$ 84,868	4
Maceman's Water Systems • 7 R	Peabody Floway 140K1 115	20,125.00 1,050.00 21,175.00	320 270 232	925 1500 1750	1.60 4.00 5.20	321.60 274.00 237.20	0.674 0.843 0.845	111.46 123.12 124.05	1.80 1.80 1.80	1.80 1.50 1.40	115.06 126.42 127.25	0.650 0.809 0.806	0.943 0.943 0.943	0.613 0.763 0.760	91.02 100.01 100.67	4505 2778 2381	\$ 66,565	\$ 87,740	8
Beach Pump Co. ***	Peabody Floway 140K1 105	19,111.00 740.00 19,851.00	320 270 232	1100 1500 1700	1.80 4.00 5.20	321.80 274.00 237.20	0.754 0.840 0.835	118.55 123.56 121.95	1.80 1.80 1.80	1.80 1.50 1.40	122.15 126.86 125.15	0.728 0.806 0.796	0.943 0.943 0.943	0.686 0.760 0.750	96.63 100.36 99.01	3788 2778 2451	\$ 63,693	\$ 83,554	1
Beach Pump Co. ***	Peabody Floway 140K1 105	19,111.00 740.00 19,851.00	320 270 232	925 1500 1750	1.60 4.00 5.20	321.60 274.00 237.20	0.674 0.843 0.845	111.46 123.12 124.05	1.80 1.80 1.80	1.80 1.50 1.40	115.06 126.42 127.25	0.650 0.809 0.806	0.943 0.943 0.943	0.613 0.763 0.760	91.02 100.01 100.67	4505 2778 2381	\$ 66,565	\$ 86,426	6
Beach Pump Co. • • •	Goulds 14 B01 105	19,703.00 740.00 20,443.00	320 270 232	1110 1500 1725	2.12 3.60 4.60	322.12 273.60 236.60	0.750 0.830 0.810	120.39 124.86 127.24	1.76 1.76 1.76	0.69 0.60 0.53	122.84 127.22 129.53	0.730 0.804 0.780	0.943 0.943 0.943	0.689 0.758 0.736	97.18 100.65 102.47	3754 2778 2415	\$ 64,009	\$ 84,462	2
Beach Pump Co. • • •	Perkins 14 1PC 120	20,823.00 740.00 21,573.00	320 270 232	900 1500 1730	1.59 3.86 5.44	321.59 273.86 237.44	0.600 0.820 0.820	121.81 126.51 126.50	2.00 2.00 2.00	0.56 0.41 0.33	124.37 128.92 128.83	0.585 0.793 0.787	0.943 0.943 0.943	0.551 0.748 0.742	98.99 101.99 101.92	4630 2778 2408	\$ 70,641	\$ 92,214	11
Beach Pump Co. • • •	Byron Jackson 15M01 75 corrected to \$23573	19,703.00 740.00 20,443.00	320 270 232	1000 1500 1700	1.58 3.18 3.56	321.58 273.18 235.56	0.760 0.820 0.790	106.85 126.19 128.01	1.68 1.68 1.68	0.60 0.48 0.40	109.13 128.35 130.09	0.740 0.797 0.766	0.943 0.943 0.943	0.698 0.751 0.722	86.33 101.54 102.91	4167 2778 2451	\$ 64,162		
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Kelly's Pump 10	Worthington Dresser 154 15M154	20,878.00 1,000.00 21,878.00	320 270 232	960 1500 1760	1.50 3.30 4.30	321.50 273.50 236.30	0.750 0.845 0.830	103.81 122.60 126.51	1.80 1.80 1.80	0.60 0.60 0.50	106.25 125.00 126.83	0.730 0.818 0.800	0.943 0.943 0.943	0.688 0.777 0.755	84.06 98.89 101.92	4340 2778 2367	\$ 63,215	\$ 85,093	5
Kelly's Pump 11	Byron Jackson 15M01 154	22,827.00 1,000.00 23,827.00	320 270 232	1000 1500 1700	1.58 3.18 3.56	321.58 273.18 235.56	0.760 0.820 0.790	106.85 126.19 128.01	1.68 1.68 1.68	0.60 0.48 0.40	109.13 128.35 130.79	0.740 0.797 0.766	0.943 0.943 0.943	0.698 0.751 0.722	86.33 101.54 102.91	4167 2778 2451	\$ 64,162	\$ 87,989	10

Notes:

* 1 year from start up warranty instead of 4000 hrs specified
 ** Added \$472 deduct for std. lineshaft

*** some as * plus qualification that well straightness may affect warranty
 # aluminum frame motor instead of cast iron specified

1/23/89 P&W22.xls

EXHIBIT A